

Last name_____ First name_____SID_____

Essay questions (20 pts): pick **one** and only one to answer; **circle** the one you choose. Write a page **on the back of this sheet**. This side is for your personal notes only. Cover the important points in a clear and concise manner – as if you have only a few minutes to tell the President, your roommate, or your parent, what that person needs to know. *Clear, effective writing is important*. If English is not your first language, state so at the top of your essay. If you need to re-write it, ask for a new copy.

1. Artificial Earth satellites. With the terrorism continuing in Iraq, some people assume the US has placed a spy satellite above that country. Have we? Discuss the different altitudes at which satellites can orbit, and give examples of the applications at each altitude. Discuss the possibility of placing a satellite permanently above Iraq. What other options do we have for watching Iraq from above?

2. How dangerous is radioactivity? Discuss the real and imagined dangers. Give examples, along with numbers. Which risks are known from direct observation, and which are known only from calculations? What assumptions are made in calculating risk?

This page is for name and notes only.

The essay should be on the other side.